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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/08/2000

Tetsuro Ashida

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EXAMINER

BALI, VIKKRAM

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

08/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/707,948	<b>Applicant(s)</b> ASHIDA ET AL.	
	<b>Examiner</b> Vikkram Bali	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28, 32-36 is/are rejected.
- 7) ☒ Claim(s) 29-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/03/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

In response to the amendment filed on 07/23/2007, the finality [Office Action 3/22/2007] is withdrawn. Per the persuasive arguments filed on 7/23/2007 regarding the rejection of claims 2-6 and 13-18 under 35 USC 112 second paragraph, all the rejections under 35 USC 112 second paragraph is withdrawn.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 7-8, 10, 19, 22, 24, 27, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al (US 6195474).

With respect to claim 7 (exemplary claim) Snyder discloses enhancing an image that includes a reproducing an image in visible form based on an input image data on an output device, (see figure 16) and executing a function automatically changing a part of selected image by the user and the selected part is less than the whole, (see col. 8, lines 50-68, wherein the user selected subregion is adjusted), as claimed. However, he fails explicitly disclose the dynamic range i.e. changing the dynamic range, and a range of image information ... is widened compared to a range of image ... when the function ... is executed, as claimed. But, Snyder does adjust the contrast in the selected subregion, (see col. 8, lines 52-54), and the adjusting the contrast is read as the "changing dynamic range" because as defined in the specification page 9, lines 23-24, and this contrast change widened the range of the part of the image that is viewed, the dynamic range changing is done in order to help the viewer view the part with the grater detail, and by adjusting the contrast does the same function. Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to articulate the contrast adjustment "changing dynamic range" in order to help the user view the subregion "part" with more detail.

With respect to claims 8 and 10, Snyder disclose the invention substantially as disclose and as describe above. However, he fails to disclose, the specifying area is specified by using the touch panel where the viewer selects the area, as claimed. Examiner would like to take the official Notice as the selection of the area using the touch panel is well known in the art in apparatus such as games, PDA's, etc. Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to

articulate the well known feature in the art of the touch panel in order to select the desired area to do the dynamic range change of an image.

With respect to claim 22, Snyder fails to explicitly calls for reflectance ratio, as claimed. But, one ordinary skilled in the art at the time of invention can articulate the reference of Snyder to have the refelectance ratio as the reflectance ratio is one of the component in the Image.

With respect to claim 27, Snyder further discloses a display (see figure 16) as claimed.

Claim 1, 32 and 35 is rejected for the same reasons as set forth in the rejection of claim 7, as claim 1, 32 and 35 is claiming similar subject matter as claim 7.

Claim 19 is rejected for the same reasons as set forth in the rejection of claim 22, as claim 19 is claiming similar subject matter as claim 22.

Claim 24 is rejected for the same reasons as set forth in the rejection of claim 27, as claim 24 is claiming similar subject matter as claim 27.

4. Claims 9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al (US 6195474)) in view of Molloy (US 6078349).

With respect to claims 9 and 11-12, Snyder disclose the invention substantially as disclose and as describe above. However, he fails to disclose action of the viewer viewing the image is a movement of the viewer eye and the area selected is by the eye movement having a line of sight detection apparatus, as claimed. Molloy teaches a display apparatus that includes a action of the viewer viewing the image is a movement

of the viewer eye and the area selected is by the eye movement having a line of sight detection apparatus, (see col. 4, lines 29-39, wherein the display 14 does have a screen 12 the viewer 10 controls the focus of a region 18 by the eye tracking technology see col. 9 lines 43-50) as claimed.

Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to combine the two references because they are analogous as they are solving similar problem of image enhancement. The Snyder does include some sort of a user interaction in order to do the dynamic range change of the image and the user interaction as taught by the Molloy can be introduce in place of the user interaction of the Snyder in order to enhance the display of the image.

5. Claims 2, 3-4, 6, 13, 14, 16, 20, 21, 23, 25, 26, 28, 33-34 and 36 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (US 5953459) in view of Snyder et al (US 6195474).

With respect to claim 3 (exemplary claim) as best understood Ueda discloses an image data input (see figure 2, 10); an image output device (see figure 2, 19); a tone conversion characteristic varying device (see figure 39, 132, and col. 38, lines 58-61) and image processing device to create the image per the tone characteristic set selected by the viewer, (see col. 38 line 58 through col. 39, line 6, the "automatically" is read as the processing done by the CPU); the function for ... reproduced image is executed, a range of out put values ... is wider after executing the function, (see the and col. 38, lines 58-61, the values of  $\gamma$  is chosen by the user and this values can be

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increased or decreased per the interest of the viewer and therefore the values are widen or not per the function in equation 5 in col. 39, and these values can be less than or more than the entire range of the possible out put values) as claimed. However, he fails to explicitly disclose the at least a part of the image and wherein the part is less than the whole, as claimed. Snyder teaches least a part of the image and wherein the part is less than the whole, (see col. 8, lines 50-68, wherein the user selects a subregion) as claimed.

It would have been obvious to one ordinary skilled in the art at the time of invention to combine the two references as they are analogous because they are solving the similar problem of image processing in order to enhance the image. The teaching of Snyder can be incorporated in the system of Ueda in order to have the viewer view the image on the display with more clarity.

With respect to claim 4, Ueda further discloses the playback apparatus being the printer, (see figure 38, 116) as claimed.

With respect to claim 6, Ueda disclose the invention substantially as disclose and as describe above. However, he fails to disclose the output device is the display device and the specifying area is specified by using the touch panel where the viewer selects the area, as claimed. Examiner would like to take the official Notice as the features of having the image output device be a display device and the selection of the area using the touch panel is well known in the art in apparatus such as PDA's, the output data could very well be displayed and could be selected using the touch panel etc. Therefore, it would have been obvious to one ordinary skilled in the art at the time of

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invention to simply use the well known feature in the art of the touch panel display system in order to select the desired area to do the tone conversion of the image.

Claims 2, 13, 33-34 and 36 are rejected for the same reasons as set forth in the rejection of claim 3, as claims 2, 13, 33-34 and 36 are claiming similar subject matter as claim 3.

Claims 20, 21 and 23 are rejected for the same reasons as set forth in the rejection of claim 22, as claims 20, 21 and 23 are claiming similar subject matter as claim 22.

Claims 25, 26 and 28 are rejected for the same reasons as set forth in the rejection of claim 27, as claims 25, 26 and 28 are claiming similar subject matter as claim 27.

With respect to claims 14 and 16, Ueda disclose the invention substantially as disclose and as describe above. However, he fails to disclose the action of the viewer is a manual input to a touch panel device and the specifying area is specified by using the touch panel where the viewer select the area, as claimed. Examiner would like to take the official Notice as the features of having the image output device be a touch panel display device and the selection of the area using the touch panel is well known in the art in apparatus such as PDA's, the output data could very well be displayed data as long as there is an image memory (see figure 38, 132 output image memory) and could be selected using the touch panel etc. Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to simply use the well known feature in



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the art of the touch panel display system in order to select the desired area to do the tone conversion of the image.

6. Claims 5, 15 and 17-18 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (US 5953459) in view of Snyder et al (US 6195474) and in further view of Molloy (US 6078349).

With respect to claim 5, Ueda and Snyder disclose the invention substantially as disclose and as describe above. However, they fail to disclose the output device be the display device, and the area specifying device comprises a line of sight detection apparatus and action of the viewer viewing the image is a movement of the viewer eye and the area selected is by the eye movement having a line of sight detection apparatus (as claimed in claims 15 and 17-18), as claimed. Examiner would like to take the official Notice as the features of having the image output device be a display device, as the image output data could very well be displayed on a display before printing the image data as long as there is an image memory (see figure 38, 132 output image memory). Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to simply use the well known feature in the art of the touch panel display system in order to select the desired area to do the tone conversion of the image. Molloy teaches a display apparatus that includes a action of the viewer viewing the image is a movement of the viewer eye and the area selected is by the eye movement having a line of sight detection apparatus, (see col. 4, lines 29-39, wherein the display 14 does have a screen 12 the viewer 10 controls the focus of a region 18 by the eye

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tracking technology see col. 9 lines 43-50) as claimed. Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to combine the references because they are analogous as they are solving similar problem of image enhancement. The Ueda and Snyder does include some sort of a user interaction in order to do the tone conversion of the image and the user interaction as taught by the Molloy can be introduce in place of the user interaction of the Ueda in order to enhance the display of the image.

#### ***Allowable Subject Matter***

7. Claims 29-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

8. Applicant's arguments filed 7/23/2007 have been fully considered but they are not persuasive. Also, applicant's attention is diverted to the response to the arguments made in office action dated 3/22/2007.

Applicant argues that the limitations to the independent claims 1, and 7 are not taught by the reference. Examiner disagrees and would like to point the attention of the applicant to the rejection of claims 1 and 7 above. Applicant argues that the reference Snyder is teaching away and therefore the rejection should be withdrawn.

Examiner disagrees, Snyder in col. 9, lines 12-21 teaches that the contrast can be added or subtracted as selected to the selected part of the image. That is the image is narrowed or widened, as claimed.

Therefore, the rejections are maintained.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

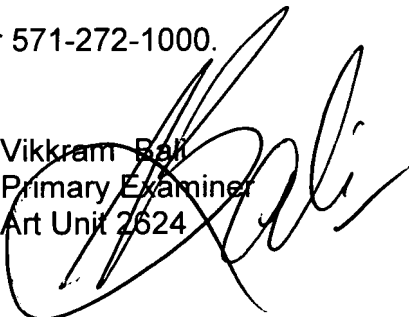
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 571.272.7415. The examiner can normally be reached on 7:00 AM - 3:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571.272.6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vikkram Bali  
Primary Examiner  
Art Unit 2624



vb  
August 6, 2007